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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/725,955	11/30/2000	Marcel Bourrier	N1239	8639

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EXAMINER

IBRAHIM, MEDINA AHMED

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 03/26/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/725,955

Applicant(s)

BOURRIER, MARCEL

Examiner

Medina Ibrahim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Claims 1-35 are pending in this application and are under examination.

Information Disclosure Statement

No IDS has been filed with the instant application.

Drawings

No drawings have been filed with the instant application.

Objections

Claims 1 and 19 are objected to for failing to recite complete Accession information. The ATCC Accession No. must be filled in as appropriate

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 15-24, 28-30, 33-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 is indefinite in the recitation of "wherein the plant is male sterile" since the claim from which claim 6 depends is drawn to a plant that is not a male sterile. If Applicants intend to claim a male sterile plant derived from the plant of claim 2, the claim should be recited as such.

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In claim 15, would "different corn plant" means "genetically different corn plant" or "another corn plant"? Also, "an" should be changed to ---the---. Dependent claim 16 is included in the rejection.

In claims 19-24, "MNI1-derived corn" plant renders the claims indefinite as it is unclear what is being retained in the derivative or in the derived material.

In claims 20, 22, 24, 30, and 35, "relative maturity", "excellent", "early pollen shed" and "above average", are relative terms lacking a comparative basis. Also, "adapted to" is indefinite.

In claim 23, "still" before "further" should be deleted, for clarification.

Claim 28 is indefinite for failing to recite proper method steps. Dependent claim 30 is included in the rejection.

Claim 29 is indefinite in the recitation of "The corn plant breeding program of claim 28", because claim 28 is drawn to a method for developing a corn plant rather than a breeding program.

Claims 33-34 are indefinite in the recitation of "The single gene conversion of the corn plant of claim 31", because claim 31 is drawn to a corn plant rather than a single gene conversion.

Written Description

Claims 22, 24, 30, and 35 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had

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possession of the claimed invention. The claimed invention lacks written description under current written description guidelines. The claims encompass corn plants of an undisclosed number of generations having at least one ancestor of MNI1 corn plant as well as MNI1-derived or further MNI1-derived corn plants obtained by repeated crossing of a MNI1-derived corn plant with itself or with another non-MNI1 corn plant by a number of generations. The breeding techniques include recurrent, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker selection, and transformation which would result in morphologically and physiologically different plants. The specification only discloses a single inbred corn line, MNI1 with specified morphological and physiological characteristics. The claims do not recite that the plants retain all the morphological and physiological characteristics of the MNI1 corn plants. There are no relevant identifying characteristics which would allow one skilled in the art to predictably determine what will be the physiological and morphological characteristics of these MNI1-derived or further MNI1-derived corn plants. The only characteristics disclosed for the plants are the expression of the combination of at least two traits which were described with relative terms that lack comparative basis (see the rejection under 35 USC, 112, 2nd paragraph).

The Federal Circuit court stated that a written description of an invention “requires a precise definition, such as by structure, formula [or} chemical name, of the claimed subject matter sufficient to distinguish it from other material”. *University of California v. Eli Lilly and Co.*, 43 USPQ2d 1398 (Fed. Cir. 1997). The court also stated that “naming a type of material generally

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known to exist, in the absence of knowledge as to what that material consists of is not a description of that material". *Id.* Further, the court held that to adequately describe a claimed genus, Applicant must describe a representative number of the species of the claimed genus, and that one of skill in the art should be able to "visualize or recognize the identity of members of the genus". *Id.* In the instant case, the disclosure of a single corn inbred line, MNI1, does not provide an adequate written description for the claimed genus, MNI1-derived or further MNI1-derived corn plants, wherein only one ancestor of the plant is known to be MNI1, and the rest of the ancestors are unknown. Accordingly, the claimed invention lacks adequate written description as required under the current written description guidelines (See Written Description Requirement published in Federal Registry/Vol. 66, No. 4/Friday, January 5, 2001/Notices; P. 1099-1111).

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

a person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

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Piper teaches an inbred corn line which is a yellow dent corn adapted to northcentral region and express traits of dark green leaf, moderate pollen shed, no bar glumes, distinct kernel row, moderate anthocyanin of brace roots, high yield, strong stalk, and high resistance to diseases and other adverse climatic conditions (see columns 11-14). Corn breeding and tissue culture methods are also disclosed.

Piper does not teach a corn plant with leaf sheath pubescence or slightly curved kernel row alignment.

It would have been prima facie obvious to an ordinary plant breeder to utilize the corn inbred taught by Piper, and to modify that inbred by crossing with other corn plants to introduce desired agronomic traits, as suggested by Piper et al.

No claim is allowed.

Papers relating to this application may be submitted to Technology Sector 1 by facsimile transmission. Papers should be faxed to Crystal Mall 1, Art Unit 1638, using fax number (703) 308-4242. All Technology Sector 1 fax machines are available to receive transmissions 24 hrs/day, 7 days/wk. Please note that the faxing of such papers must conform with the Notice published in the Official Gazette, 1096 OG 30, (November 15, 1989).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina a. Ibrahim whose telephone number is (703) 306-5822. The Examiner can normally be reached Monday -Tuesday from 8:00 AM to 5:00 PM and Wednesday-Thursday from 9:00AM to 3:00PM

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amy Nelson, can be reached at (703) 306-3218.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0196.

March 22, 2002
mai



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